

**Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application:

**Listing of Claims:**

- 1-10. (Cancelled)
11. **(Currently amended)** A method of treating pain which comprises administering a therapeutically effective amount of spongiosine (2-methoxyadenosine) to a human subject in need of such treatment.
12. (Previously Presented) The method of claim 11, wherein the pain is hyperalgesia.
13. (Previously Presented) The method of claim 12, wherein the hyperalgesia is neuropathic pain.
14. (Previously Presented) The method of claim 11, wherein the pain is caused by or associated with damaged sensory neurons.
15. (Cancelled)
16. (Previously Presented) The method of claim 12, wherein the hyperalgesia is inflammatory pain.
17. (Previously Presented) The method of claim 11, wherein the pain is caused by or associated with inflammation.

18. (Cancelled)
19. **(Currently Amended)** The method of claim 11, wherein spongostin is administered at a dose that gives rise to plasma concentrations one fifth to one thousandth of the minimum plasma concentration of spongostin that gives rise to bradycardia, hypotension or tachycardia side effects in the human subject ~~animals of the same species as the subject to which the dose is to be administered.~~
20. (Previously Presented) The method of claim 19, wherein the dose gives rise to plasma concentrations one fifth to one hundredth of the minimum plasma concentration of spongostin that gives rise to the side effects.
21. **(Currently Amended)** The method of claim 11, wherein spongostin is administered at a dose that is one fifth to one fiftieth of the minimum dose of spongostin that gives rise to bradycardia, hypotension or tachycardia side effects in the human subject ~~animals of the same species as the subject to which the dose is to be administered.~~
22. (Previously Presented) The method of claim 21, wherein the dose is one fifth to one tenth of the minimum dose that gives rise to the side effects.
23. (Previously Presented) The method of claim 11, wherein spongostin is administered at a dose of less than 6 mg/kg.
24. (Previously Presented) The method of claim 11, wherein spongostin is administered at a dose of at least 0.01 mg/kg.
25. (Previously Presented) The method of claim 11, wherein spongostin is administered at a dose of at least 0.1 mg/kg.

26. (Previously Presented) The method of claim 25, wherein spongostin is administered at a dose of 0.1 to 1 mg/kg.

27.-28. (Cancelled)

29. (Previously Presented) The method of claim 11, wherein spongostin is administered orally, parenterally, sublingually, transdermally, intrathecally, or transmucosally.

30. (Previously Presented) The method of claim 11, wherein spongostin is administered at a frequency of 2 or 3 times per day.

31. (Previously Presented) The method of claim 11, wherein the subject is a human subject.

32-50. (Cancelled)

51. (Previously Presented) The method of claim 49, wherein the pain is associated with or caused by inflammation.

52. (Previously Presented) The method of claim 49, wherein the pain is associated with or caused by thermal hyperalgesia.

53. (New) A method of treating pain which comprises administering spongostin (2-methoxyadenosine) to a human subject in need of such treatment, wherein the spongostin is administered at a dose that gives rise to plasma concentrations one fifth to one thousandth of the minimum plasma concentration of spongostin that gives rise to bradycardia, hypotension or tachycardia side effects in humans.

54. (New) The method of claim 53, wherein the pain is hyperalgesia.

55. (New) The method of claim 54, wherein the hyperalgesia is neuropathic pain.

56. (New) The method of claim 53, wherein the pain is caused by or associated with damaged sensory neurons.
57. (New) The method of claim 54, wherein the hyperalgesia is inflammatory pain.
58. (New) The method of claim 53, wherein the pain is caused by or associated with inflammation.
59. (New) The method of claim 53, wherein spongiosine is administered at a dose that gives rise to plasma concentrations one fifth to one thousandth of the minimum plasma concentration of spongiosine that gives rise to bradycardia, hypotension or tachycardia side effects in animals of the same species as the subject to which the dose is to be administered.
60. (New) The method of claim 59, wherein the dose gives rise to plasma concentrations one fifth to one hundredth of the minimum plasma concentration of spongiosine that gives rise to the side effects.
61. (New) The method of claim 53, wherein spongiosine is administered at a dose that is one fifth to one fiftieth of the minimum dose of spongiosine that gives rise to bradycardia, hypotension or tachycardia side effects in animals of the same species as the subject to which the dose is to be administered.
62. (New) A method of treating pain which comprises administering spongiosine (2-methoxyadenosine) to a human subject in need of such treatment comprising administering a therapeutically effective amount of spongiosine to the human subnet, wherein spongiosine is administered at a dose of less than 6 mg/kg.

63. (New) The method of claim 62, wherein spongosome is administered at a dose of at least 0.01 mg/kg.
64. (New) The method of claim 62, wherein spongosome is administered at a dose of at least 0.1 mg/kg.
65. (New) The method of claim 62, wherein spongosome is administered at a dose of 0.1 to 1 mg/kg.